

10/555658

JC06 Rec'd PCT/PTO 04 NOV 2005

Docket No.: 6268-000011/US/NP
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kunihiko Mori et al.

Application No.: Not Yet Assigned

Confirmation No.: N/A

Filed: Concurrently Herewith

Art Unit: N/A

For: Mode-Locked Laser And Optical Multi-Carrier Source Using Same

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

MS PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

A summary/abstract translation of the non-English language references is enclosed.

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications.

Application No.: Not Yet Assigned

Docket No.: 6268-000011/US/NP

Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

A concise explanation of relevance of the items listed on form PTO/SB/08 is in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

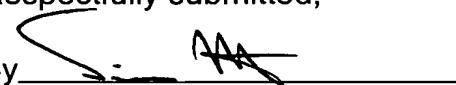
It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Our check in the amount of \$2,920.00 covering the fee set forth in 37 CFR 1.492(a), 1.492(c)(2), 1.492(b)(3), 1.21(h), 1.16(f), and 1.492(e) is enclosed. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 08-0750, under Order No. 6268-000011/US/NP. A duplicate copy of this paper is enclosed.

Dated: November 4, 2005

Respectfully submitted,

By _____


Timothy D. MacIntyre
Registration No.: 42,824
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600
Attorney for Applicant

JCP2 DocId: PCT/PTO 04 NOV 2005

PTO/SB/08a/b (07-05)

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|---------------------------------|---|----|---|--|-----------------------|
| Substitute for form 1449A/B/PTO | | | | <i>Complete if Known</i> | |
| | | | | 10/55658 | |
| | | | | Application Number | Not Yet Assigned |
| | | | | Filing Date | Concurrently Herewith |
| | | | | First Named Inventor | Kunihiko Mori |
| | | | | Art Unit | N/A |
| | | | | Examiner Name | Not Yet Assigned |
| Sheet | 1 | of | 2 | Attorney Docket Number 6268-000011/US/NP | |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|-----------------------|---|--------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Document Number Number-Kind Code ² (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| AA* | | US-6,282,214-B1 | 08-28-2001 | Goto et al. | |
| AB* | | US-6,356,693-B1 | 03-12-2002 | Shimizu et al. | |

| FOREIGN PATENT DOCUMENTS | | | | | |
|--------------------------|-----------------------|--|--------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| BA | | JP-11-145554-A | 05-28-1999 | | |
| BB | | JP-2000-277849-A | 10-06-2000 | | ✓ |
| BC | | JP-08-148749-A | 06-07-1996 | | ✓ |
| BD | | JP-09-318832-A | 12-12-1997 | | ✓ |
| BE | | JP-2000-151000-A | 05-30-2000 | | ✓ |
| BF | | JP-11-284274-A | 10-15-1999 | | ✓ |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS | | | | | |
|---------------------------------|-----------------------|---|--|--|----------------|
| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | | | T ² |
| | CA | TaKara, H. et al., "More than 1000 channel optical frequency chain generation from single supercontinuum source with 12.5 GHz channel spacing", In: Electronics Letters, Vol. 36, Issue 25, 07 December 2000 (07.12.00), pages 2089 to 2090 | | | |
| | CB | Mori, K. et al., "Flatly broadened supercontinuum spectrum generated in a dispersion decreasing fibre with convex dispersion profile", In: Electronics Letters, Vol. 33, Issue 21, 09 October 1997 (09.10.97), pages 1806 to 1808 | | | |
| | CC | Hansen, K.P. et al., "Fully dispersion controlled triangular-core nonlinear photonic crystal fiber", Optical Fiber Communication Conference and Exhibit, OFC 2003, Vol. 3, 23-28 March 2003, pages PD 2-1 to PD 2-3 | | | |
| | CD | K. Imai et al., "500 Gb/s (50 x 10 Gb/s) WDM Transmission over 4,000 km Using Broadband EDFAs and Low Dispersion Slope Fiber", OFC/IOOC '99 Postdeadline Papers | | | |
| | CE | Hiro Suzuki et al., "12.5 GHz Spaced 1.28 Tb/s (512-Channel x 2.5 Gb/s) Super-Dense WDM Transmission over 320 km SMF Using Multiwavelength Generation Technique," IEEE Photonics Technology Letters, Vol. 14, No. 3, March 2002 | | | |
| | CF | Shigeru Ishii et al., "Longitudinal Mode Dependence of Transmission Characteristics for Injection Locked FP-LD," The 2002 General Assembly of the Institute of Electronics, Information and Communication Engineers, B-10-155 (with English summary) | | | |
| | CG | Mitsuhiko Teshima et al., "Experimental Investigation of Injection Locking of Fundamental and Subharmonic Frequency-Modulated Active Mode-Locked Laser Diodes," IEEE Journal of Quantum Electronics, Vol. 34, No. 9, 9 September 1998 | | | |
| | CH | Takashi Yamamoto et al., "Low-Noise Optical Frequency Comb Generation Using Phase | | | |

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|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|

TDM/smc

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| Substitute for form 1449A/B/PTO | | | | Complete if Known | |
|---------------------------------|---|----|---|------------------------|-----------------------|
| | | | | Application Number | Not Yet Assigned |
| | | | | Filing Date | Concurrently Herewith |
| | | | | First Named Inventor | Kunihiko Mori |
| | | | | Art Unit | N/A |
| | | | | Examiner Name | Not Yet Assigned |
| Sheet | 2 | of | 2 | Attorney Docket Number | 6268-000011/US/NP |

| | | | |
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| | | Modulator," 1st Microwave/Millimeter Wave Photonics (MWP) Research Meeting, The Institute of Electronics, Information and Communication Engineers, MWP 03-4 (10--2003.10) (with English translation) | |
|--|--|--|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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|--------------------|--|-----------------|--|
| Examiner Signature | | Date Considered | |
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PRIOR ART INFORMATION LIST

| | |
|---------------|-------------------|
| your case No. | |
| our case No. | 0003283_NT_PCT-US |

| Inventor, Patent Number, Country Author, Title, Name of Document | Issue date | Concise Explanation of the Relevance (indication of page, column, line figure of the relevant portion) |
|---|----------------|--|
| “500 Gb/s (50 x 10 Gb/s) WDM Transmission over 4,000 km Using Broadband EDFAs and Low Dispersion Slope Fiber,” by K. Imai et al., OFC/IOOC '99 Postdeadline Papers | 1999 | Technological background |
| “12.5 GHz Spaced 1.28 Tb/s (512-Channel x 2.5 Gb/s) Super-Dense WDM Transmission over 320 km SMF Using Multiwavelength Generation Technique,” by Hiro Suzuki et al., IEEE Photonics Technology Letters, Vol. 14, No. 3 | March 2002 | Technological background |
| “Longitudinal Mode Dependence of Transmission Characteristics for Injection Locked FP-LD,” by Shigeru Ishii et al., The 2002 General Assembly of the Institute of Electronics, Information and Communication Engineers, B-10-155 | 2002 | Technological background |
| “Experimental Investigation of Injection Locking of Fundamental and Subharmonic Frequency-Modulated Active Mode-Locked Laser Diodes,” by Mitsuhiro Teshima et al., IEEE Journal of Quantum Electronics, Vol. 34, No. 9 | September 1998 | Technological background |
| “Low-Noise Optical Frequency Comb Generation Using Phase Modulator,” by Takashi Yamamoto et al., 1st Microwave/Millimeter Wave Photonics (MWP) Research Meeting, The Institute of Electronics, Information and Communication Engineers, MWP03-4 | October 2003 | Technological background |

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PRIOR ART INFORMATION LIST

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|---------------|-------------------|
| your case No. | |
| our case No. | 0003283_NT_PCT-US |

| Inventor, Patent Number, Country Author, Title, Name of Document | Issue date | Concise Explanation of the Relevance (indication of page, column, line figure of the relevant portion) |
|--|--------------|---|
| Written Opinion of the International Searching Authority for PCT/JP2005/001615 | May 17, 2005 | Claims |